

ABSTRACT

To provide TFT of improved low-temperature polycrystalline layer that has higher electron mobility and assures less fluctuation in manufacture in view of realizing a liquid-crystal display device having a large display area by utilizing a glass substrate.

A TFT having higher electron mobility can be realized within the predetermined range of characteristic fluctuation by utilizing the semiconductor thin-film (called quasi single crystal thin-film) formed of poly-crystal grain joined with the {111} twin-boundary of Diamond structure as the channel region (namely, active region) of TFT.